

OPINION MINING ON MALAYSIA POLITICAL LEADER'S SOCIAL MEDIA

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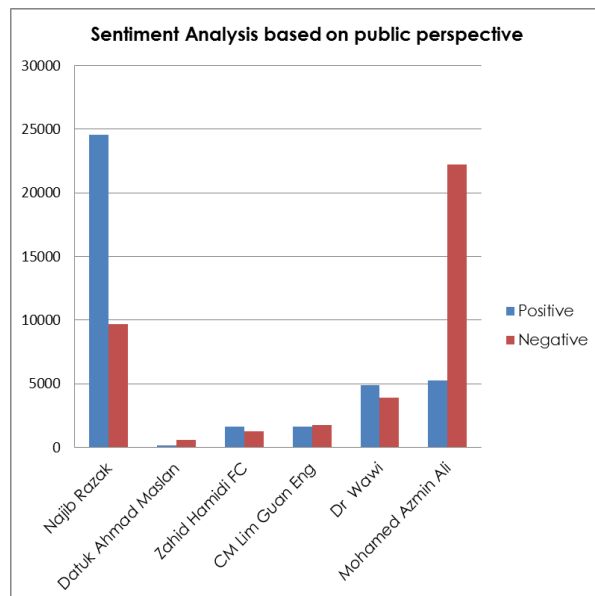
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Graphical abstract



a. GRAPHICAL ABSTRACT SHOULD REPRESENT THE CONTENT OF THE ARTICLE-

b. ABSTRACT

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Abstract

Nowadays, social media have been a platform for user communication across the world. Users share their opinions on several aspects of daily life. With the rapid growth of social media, human being and societies are increasingly using public perspectives in these media in making decision. However, finding the opinion within well-known people's social media is typically a vast research. It will have the difficulty on the languages and the societies involve. Hence, this paper is focussing on Opinion Mining on Malaysia Political Leader's Social Media. The data extraction from Malaysia Political Leader's Facebook comments, is required to analyse the reaction between positive and negative perspective towards them. Therefore, the data is extract from their social media page and fetch using FacePager, which is one of the tool for fetching data. This evaluations display that the methods have perform the problem solving and data gained is visualized into bar graph accordingly to political leader for government and opponent parties.

Keywords: Malaysia Political Leader's Facebook Page, social media, public perspective, reaction, opinion mining

Abstrak

Pada masa kini, media sosial telah menjadi platform untuk pengguna berkomunikasi di seluruh dunia. Pengguna berkongsi pendapat mengenai beberapa aspek dalam kehidupan seharian mereka. Pertumbuhan pesat media sosial membuatkan manusia dan masyarakat membuat keputusan berdasarkan perspektif awam dalam media. Walau bagaimanapun, bagi mengkaji media sosial orang kenamaan adalah sangat luas. Hal ini mendapat kesukaran pada bahasa dan masyarakat yang terlibat. Oleh itu, kertas ini memberi fokus kepada Pendapat Awam tentang Pemimpin Politik Malaysia. Pengekstrakan data daripada komen di Facebook Pemimpin Politik Malaysia diperlukan untuk menganalisis tindak balas antara perspektif positif dan negatif terhadap mereka. Oleh itu, data diekstrak dari laman media sosial mereka dengan menggunakan FacePager, yang merupakan salah satu alat untuk mengambil data. Penilaian ini memaparkan bahawa kaedah yang dinyatakan dapat menyelesaikan masalah yang dihadapi dan data ditunjukkan ke dalam graf bar mengikut pemimpin politik untuk pihak kerajaan dan pembangkang.

Kata kunci: Laman Facebook Pemimpin Politik Malaysia, media

sosial, perspektif awam, tindak balas, pendapat awam

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1.0 INTRODUCTION

In this sophisticated era, with a convergence of technology, then comes the variety of advanced technologies that make it easy to communicate and share information through social media. Usually people use social media to share their opinions, expressed their emotion, build connection with people around the world, or buying products or services. Many people apparently used social media as part of their daily life. The social media promotes a medium that ease people to communicate with other online community about areas of mutual interest (Adam Mahamat Helou & Nor Zairah Ab. Rahim, 2014). This clearly shows that the use of the social media is because the ease of use is promising to share and obtain information from individuals who share the same interests with them. For the past few years, the growth of this platforms such as Facebook, twitter and etc. has urge the researcher to find out about sentiment analysis and seeking way on how the public use the social media to express what do they feel and think. This paper is going analyse on how public express their feelings in their own informal language towards any particular post. This paper will approach the issue from perspective of Sentiment Analysis and Social Media. Sentiment Analysis is basically a process of computationally identifying and categorizing opinions expressed in a piece of text, especially in order to determine writer's attitude towards a particular topic or product whether it is positive, negative or neutral. This paper is about public's opinion and how they expressed their thoughts and feelings towards a particular post on the page and will be categorized it into positive or negative. From the categorization, the result that whether it is more into negative or positive. Information such as the post and comments are the most useful and beneficial information that that needed to do this project. For this project, the way to identifying the information has been discovered which is using keywords. The thing that motivates to approach the issue from perspective of sentiment analysis is to discover on how public express their feeling towards any particular post by using social media as a platform.

2.0 RELATED WORK / LITERATURE REVIEW

This paper reference's is based on 'Sentiment Analysis: Facebook Status Messages' research paper. By focussing on Malaysia Political Leader's social media, this paper is very related because the Facebook is used as a medium for data extraction on comments and posts while doing the analysis. This paper tells how to extract the data and visualize it. Plus, this paper's title is to identify the reaction on public perspective based on Malaysian Political Leaders' Social Media comments and posts. From there, the data will be extracted, then divided into positive and negative reaction. Finally, the results will showed into the bar graph representation.

3.0 METHODOLOGY

Three political leaders have been chosen from both government and opponent parties.

Government :

1. Mohammad Najib bin Tun Haji Abdul Razak
2. Datuk Hj. Ahmad bin Hj. Maslan
3. Dato' Seri Dr. Ahmad Zahid bin Hamidi

Opponent :

4. Datuk Seri Dr. Wan Azizah binti Wan Ismail
5. YB Tuan Lim Guan Eng
6. Dato' Seri Mohamed Azmin Al

First, data is collected from every post made on each Facebook page using FacePager. For the data collection, every post on the page have been extracted starting from 1st January 2016 until 31st March 2017. After finished extracted every post on the Facebook page itself, then every comments are fetch from each post using FacePager. This process will take time because the amount of data is large and good machine is needed to extract data more fast. The public comments are the most useful information where from here it can analyse whether the comments is positive or negative based on the keywords on each of the comment. All the

information will be stored in the database in .csv file. To differentiate whether the keyword is positive or negative is by using PHP code. Each keyword will be initialized and categorized into two groups, positive or negative. Each keyword will be placed into groups that they belongs to. These are keywords that have been initialized into positive and negative groups. These keywords is chosen as it is can be found the most from our data extraction.

Positive keywords

Respect, Aman, Sayang, Integriti, Ceria, Seronok, Kasih, Love, Tahniah, Sihat, Cantik, Great, Not bad, Bagus, Baik, Good, Bijak, Alhamdulillah, Syukur, Pandai, Bantu, Concern, Care, Helpful

Negative keywords

Betina, Anjing, Celaka, Babi, Cilake, Idiot, Fuck, Songlap, Cinabeng, Lies, Penipu, Bohong, Tipu, Not, Boo, Trick, Tak guna, Kurang baik, Jilake, Bad, Jahat, Kejam, Gila, Giler, Bodoh, Tak, Samun, Shit, Jgn, Mampus, Mati

If the keyword in the comment matched with the initialized keyword, the counter will update the total number of each positive or negative group. This process will be done repeatedly until finished. From the total number of positive and negative groups, the result will be visualize by using bar graph which will display which one is the highest and lowest in terms of positive and negative perspective. From that, it will show how public react towards any post on the Facebook page itself whether it more positive or negative.

4.0 RESULTS AND DISCUSSION

The data have been collected everyday starting from the 21st April 2017 till 21st May 2017. The data is obtained from six Malaysian Political Leaders and comparison are made from the opinion mining of their social media. First, comparison is done by categorized them into government and opponent. Then, this political leader's social media is analysed by using the keywords to see on what public really feel towards them. It resulted to show that the government got the more positive result than negative. While, most of the opponent got the higher negative traits than positive. The results of positive and negative aspects are shown in Table 1 respectively.

Table 1 The results of positive and negative traits from Malaysian Political Leaders

Malaysian Political Leaders Name	Opinion Mining	
	Positive	Negative
Najib Razak	24,569	9,699

Datuk Ahmad Maslan	180	615
Zahid Hamidi FC	1,642	1,241
CM Lim Guan Eng	1,641	1,756
Dr Wawi	4,869	3,914
Mohamed Azmin Ali	5,281	22,207

From this table, it showed Najib Razak get the most positive feedback compared to others. While, Mohamed Azmin Ali get the most negative perspective as stated in Table 1. While other political leaders get the average value of positive and negative feedbacks. According to this analysis, it showed that Najib Razak is the most powerful, kind and much more concern about Malaysia as he also acted as Malaysian Prime Minister. Though, that is why he got the greatest positive feedback than negative. Other than that, the political leaders from the government parties get more positive feedbacks from the public, while the political leaders from the opponent parties getting more negative feedbacks.

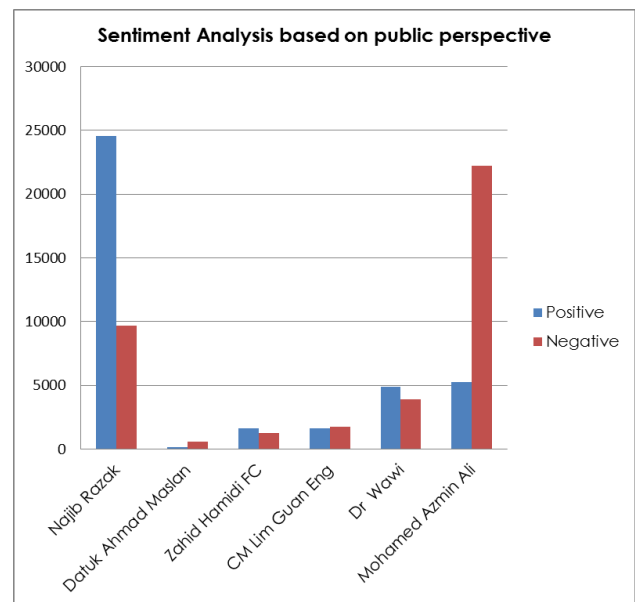


Figure 1 : The bar graph above show the Sentiment Analysis based on public perspective

This figure represented the values in Table 1 in bar graph representation. It visualized the result clearly and showed the analysis between the six of Malaysian Political Leaders into positive and negative traits.

5.0 CONCLUSION

Our results on Facebook sentiment analysis show that keywords is useful to be used to analyse the public perspective towards Malaysia Political Leader's Facebook Page. By using keywords, it is proven that is a

useful way to analyse the collected data as it produces a great outcome. From the results itself, we can see that most of the commentator expressed their thoughts and feelings in a positive way rather than negative. The crucial part of analysing data using keywords is during we want to initialize keywords into two groups which is positive and negative. We have to choose keywords that most of the public used on the social media which is based on how people in our country speak which is very hard. But we managed to overcome it by doing some research on the internet and the social media itself. From the experiment itself, we managed to visualize the positive and negative perspective based on data collected by using FacePager and analysed it using PHP coding. Further experiment has to be done to find out another alternative to analyse the sentiment analysis. It might be very useful for the researcher to

analyse how people react towards a piece of text that have characters constraint to express their emotions towards particular issues.

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